ON SEVERAL NEW GENERA AND SPECIES OF AUSTRALIAN HYMENOPTERA CHALCIDOIDEA.

BY A. A. GIRAULT, BRISBANE, AUSTRALIA (Continued from page 106.)

Tribe Haltichellini. Genus Stomatoceras Kirby.

1. Stomatoceras victoria new species.

Female: Length, 4.25 mm.

Black, somewhat shining; tegulæ, legs and basal half of abdomen ventrad (also latero-proximad), red, on the abdomen the reddish mixed with yellowish; scape (rest of antenna missing) black; fore wing with a smoky fascia across it at the stigmal vein (accented at the vein) and a rounded smoky spot farther distad nearer the costal wing margin and about half way to the wing apex from the stigmal vein, otherwise both wings hyaline.

Body rather finely rugoso-punctate, the spaces between the punctures smooth; lateral ocelli their own diameter from the eye margin or slightly more; scutellum terminating in two tooth-like plates, one on each side of the meson; abdomen finely reticulated; propodeum in the middle of the dorso-lateral aspect, with one distinct plate-like projection, another broader one indicated cephalad of it. Propodeum punctured like the rest of the thorax. Scape very long, bent at extreme tip, reaching to the cephalic ocellus, which is at the apex of the channel-like scrobicular cavity. Body finely pubescent. Posterior femur without a large tooth ventrad, its ventral margin straight but pubescent and along the distal two-thirds armed with a uniform series of minute, black, comblike teeth. Stylus of abdomen short. Postmarginal vein long.

(From a single specimen, the same magnification.)

Male: Unknown.

Described from a single card-mounted female specimen, labelled "Cheltenham, Victoria."

Habitat: Australia-Cheltenham, Victoria.

Type: No. Hy 1185, Queensland Museum, Brisbane, the above specimen; a fore wing and an antenna on a slide.

This species closely resembles *S. fasciatipennis* Bingham (1906), described from North Queensland and should be compared May, 1913

with it. However, the second abdominal segment is plainly shorter than the remainder of the abdomen.

Later, among a small collection of Chalcidoidea given to me by Mr. F. P. Dodd, I found a species of Stomatoceras which agrees with the description of S. fasciatipennis Bingham. Also, it was mounted on a card containing a flat lepidopterous cocoon, in general outline shaped like a spool, from which projected an empty pupal case and also a number of small ants. This card was labelled "Townsville, Old., 20, 5, 02. F. P. Dodd." Thus, this specimen (a female) is from the type locality of the Binghamian species, agrees with the description and appears to be a part of the same material, since its insect associates agree with those denoted by Bingham. Comparing this specimen (which I have identified as fasciatipennis and deposited in the Queensland Museum at Brisbane) with victoria, the difference between them becomes more apparent, since in the former the marginal vein is plainly longer and both the subfascia distinctly larger, especially the distal one, which extends distad half way to the apex. Also, the second abdominal segment is somewhat longer in fasciatipennis, the third and following segments short, but (segments 3-5) nearly twice the length of the corresponding segments in victoria. Otherwise, the two are much alike. A balsam slide bearing an antenna and a posterior leg goes with the cardmount

2. Stomatoceras hackeri new species.

Female: Length, 4.50 mm.

The same as the preceding species (victoria), but the scape is also dark red, including also the long pedicel and the first two funicle joints (and a part of the third); the abdomen is reddish, only along the median line of the venter; the fore wings have the same general pattern (as regards fuscation), but they are more irregularly fumated, the two fumated areas less distinctly separated, especially caudad. The posterior femora beneath are toothed less farther proximad and the apical emargination (a convexity) is more pronounced (this crenulation of the margin should not be confused with the first tooth in the family which is usually large); also from between the fine black teeth arise series of solitary, erect, stiff, but short bristles. The postmarginal vein is long.

(From a single specimen, the same magnification.)

Male: Not known.

Described from a single female specimen, minutien-mounted, from the collections of the Queensland Museum, Brisbane, labelled "Brisbane.—H. Hacker.—8–8–11."

Habitat: Australia-Brisbane, Queensland.

Type: No. Hy 1187, Queensland Museum, Brisbane, the above specimen, minutien (abdomen separated), plus a slide bearing a fore wing and antennæ.

Stomatoceroides new genus.

Female: Similar to Stomatoceras Kirby, but the postmarginal vein well developed, longer than the short marginal vein, four times the length of the stigmal and slender. Antennæ 11-jointed, inserted below the ventral ends of the eyes, the club solid, only slightly shorter than the long proximal funicle joint (a third shorter), the scape simple, long, the pedicel short, the flagellum cylindrical and a single ring joint present. Posterior femora without large teeth beneath, but their ventral margin crenulate or wayy, there being three sloping convexities, the distal two bearing a continuous series of minute, black comblike teeth (along the distal half of the margin). Scutellum terminating in a small, bidentate plate. Metathorax with no dorsolateral projections. Vertex very thin, the cephalic ocellus within the scrobicular cavity, the lateral ocelli distinct from the eve margins. Pronotum thin mesad, broadening laterad. Abdomen not produced distad, normal, the second segment largest.

Type: The following species.

1. Stomatoceroides bicolor new species.

Female: Length, 4.10 mm.

Opaque black, the legs dark reddish excepting nearly the whole of the upper margin of the posterior femur, the coxæ, the proximal halves of the tibiæ and the same portions of the cephalic and intermediate femora, all of which are black. Venation brown, the fore wings with a distinct, rounded brownish spot under the marginal vein (against it) and with a larger stain distad more or less obscure and cephalad. Head and thorax rugoso-punctate, the spaces between the punctures with fine grooves, the abdomen, finely densely polygonally reticulated, but the second segment

smooth and shining. Antenna wholly black, the distal two funicle segments subequal, each slightly less than half the length of the proximal funicle joint.

(From a single specimen, the same magnification.)

Male: Not known.

Described from a single cardmounted female specimer, labelled "Dandenong Ranges, Victoria."

Habitat: Australia-Victoria (Dandenong Mountains).

Type: No. Hy 1186, Queensland Museum, Brisbane, the above specimen; also a slide bearing an antenna and a second one, an antenna and a posterior leg.

The following species were thought to represent a new genus, but are all components of this one. Their generic characters are given herewith.

The same as Stomatoceras Kirby, the antennæ 11-jointed, the pedicel very small; the scrobicular cavity extends nearly to the occipital margin; thus the vertex acute or like a transverse carina along the occipital margin; the lateral ocelli are not within the scrobicular groove, but between its lateral margin, the eye and the true occipital margin, meso-caudad of the eye; the cephalic ocellus, however, just at the apex of the cavity. Postmarginal vein longer than the moderately long marginal, the stigmal vein very short, sessile and oval, small; submarginal vein more than four times the length of the marginal. Scutellum terminating in a small, bidentate plate. Posterior femora beneath simple—that is, without one or two large teeth, with the black, comblike teeth along distal two-thirds or more of the margin, and hairy; ventral margin of the femur straight. Propodeum with at least one dorso-lateral tooth. Antennæ long, cylindrical, without a ring-joint. Abdomen ovate.

The genus *Stomatoceroides* is more like *Hippota* Walker, but the flagellar joints are much longer, the pedicel smaller, the posterior femora armed and straight beneath, the vertex carinate, the propodeal tooth not prominent, the stigmal vein sessile, the wings clouded.

2. Stomatoceroides nigricornis new species.

Male: Length, 4.1 mm. Slender.

Opaque black, the base of the abdomen shining. Marked with dark red (Garnet) as follows: The tegulæ, tarsi, knees, tips of tibiæ and a spot at base of posterior femur (ventrad and exteriorly). Fore wings with two obscure brownish cross-bands—one at the marginal vein and the other nearly half from there to apex; the first accented under the marginal vein, the second more noticeable a short distance out from the costal margin. Venation dark. Rugoso-punctate, the abdomen distad with fine polygonal reticulations.

(From one specimen, the same magnification.)

Described from a single male specimen, minutien-mounted, labelled "Brisbane, $12{\text -}5{\text -}11$." From the Queensland Museum.

Habitat: Australia-Brisbane, Queensland.

Type: No. Hy 1188, Queensland Museum, Brisbane, the above specimen; antenna and posterior leg on a slide.

3. Stomatoceroides versicolor new species.

Female: Length, 4.0 mm. More robust than the preceding.

Opaque black, the proximal half of the abdomen and the caudal coxa and femur contrasting, bright orange yellow, with some reddish mixed in; legs otherwise black, the knees brownish; antennæ black; tegulæ black. Wings opaque, the venation dark, the marginal vein with a very distinct, sub-elongate dark brown spot under it, which does not tend to cross the wing, but is wider (proximo-distad) than long (cephalo-caudad).

Structurally agreeing with the type species, but the stigmal vein is curved slightly cephalad, the body is more robust, the antennæ very much the same, but the posterior femora beneath with the fine, black, comblike teeth only along the distal third.

(From one specimen, the same magnification.)

Male: Not known.

Described from a single female, minutien-mounted, from the collections of the Queensland Museum, labelled "Hacker, Brisbane.—6-4-11."

. Habitat: Australia—Brisbane, Queensland.

Type: No. Hy 1189, Queensland Museum, Brisbane, the forenoted female on minutien mount, plus the flagellum on a slide in xylol-balsam. 4. Stomatoceroides nigripes new species.

Female: Length, 5.00 mm.

Opaque black, the tarsi fuscous, the wings hyaline, the venation dark, with only a trace of staining under them. Like *versicolor*, but the teeth of the posterior femur along as much as the distal two-thirds of the ventral margin. Antennæ as in the other two species, but the funicle joints are longer.

(From a single specimen, similarly magnified.)

Male: Not known.

Described from a single female, cardmounted, kindly given to me by Mr. F. P. Dodd, of Kuranda, North Queensland. The specimen was labelled "From pupa of the red ant moth, Townsville, 7–11–03.—F. P. Dodd."

Habitat: Australia—Townsville, Queensland.

Type: No. Hy 1190, Queensland Museum, Brisbane, the foregoing specimen on a card, plus female antenna and posterior femur on a slide together in xylol-balsam.

Family Callimomidæ.
Podagrionini.
Pachytomoides new genus.

Female: Somewhat similar to Pachytomus Westwood and Podagrion Spinola, but the antenne lack the ring-joint and the club is enlarged, as compared with the slender filiform funicle. The second and third tarsal joints are slender. The stigmal vein has a very short neck. Ovipositor very long. Wings infuscated. Propodeum with a semicircular carina at apex around the insertion of the abdomen.

Male: Probably the same.

Type: The following species (mirus).

1. Pachytomoides mirus new species.

Female: Length, 5 inm., excluding the long, slender and curled ovipositor, which is fully 7 mm. long.

Bright metallic green, the propodeum and head metallic bluish, the abdomen red, except broadly at base above; the fore and intermediate legs reddish brown at the knees, tarsi, tips of tibiæ, proximal third of the swellen femur and distal third of the long subtriquetrous posterior coxa. Ovipositor very thin, fuscous, its valves black. Fore wings irregularly, lightly stained with brownish, the venation black. Eyes red, the ocelli darker red. Antennæ with the scape and pedicel brown, the remaining joints black.

Head and thorax very finely reticulately punctate; abdomen tapering at base, but not petiolate, strongly compressed. Ocelli distant from the eyes. Propodeum with larger reticulate punctures, its dorsum rounded, without a median carina. Postmarginal vein twice the length of the stigmal, the marginal very long, not much shorter than the submarginal. Distal third of scutellum and the mesopostscutellum smooth, but finely, closely, polygonally reticulated. Proximal abdominal segments, with very minute pin-punctures, the distal segments glabrous. Posterior coxae sculptured like the postscutellum, the posterior femur beneath armed with nine large, black, unequal teeth; the first (proximal), eighth and ninth largest; the latter stoutest, triangular, tooth 8 longest, columnar; the seventh next to the shortest, paired—that is, a bidentate, erect plate; the two dentations here counted as separate teeth, though united at base; the two teeth equal; teeth 4 and 5 unequal, also more or less united at base; tooth 2 shortest. obtuse, nipplelike.

Antennæ inserted in the middle of the face, 13-jointed, the funicle filiform, but its distal joint widening somewhat, becoming wider than long; scape simple, not as long as the club; pedicel somewhat longer than the first funicle joint; joint 2 of funicle longest, joint 3 next, the distal joint shortest; joint 5 subequal in length to the pedicel, the following funicle joints all shorter, club joints nearly equal, the distal one slightly the longest.

(From a single specimen, the same magnification.)

Male: Not known.

Described from a single female, minutien-mounted, in the collections of the Queensland Museum, labelled "Q. M. Brisbane. H. Hacker.—20–5–1911."

Habitat: Australia-Brisbane, Queensland.

Type: No. Hy 1191, Queensland Museum, Brisbane, the fore-described female on a minutien mount, plus one slide of xylol-balsam bearing the antennæ and a posterior femur.

2. Pachytomoides greeni (Crawford).

Podagrion greeni Crawford, 1912,* pp. 3-4; fig. 1.

This Cingalese species reared from the eggs of a mantid must be referred to this genus, though the female bears an abdominal petiole. Otherwise, it agrees with the species generically.

NEW ICHNEUMONOIDEA PARASITIC ON LEAF-MINING DIPTERA.

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With a single exception the type specimens of the seven supposed new species described in the following paper were furnished by Prof. F. M. Webster, of the United States Department of Agriculture, and the designated hosts are on his authority. The types of one species were reared by the writer.

Family BRACONID Æ. Sub-family Opiinæ.

Opius utahensis, n. sp.

Female.—Length, 2.25 mm. Head transverse; vertex, temples, cheeks and occiput smooth and polished with sparse whitish hairs, the frons bare except along the eye margins; face with distinct round punctures and moderately hairy; clypeus fitting closely to the mandibles: mandibles without a notch on the ventral margin: antennæ longer than the body, pubescent, 32-jointed in the type, the first flagellar joint one-third longer than the second. pleuræ with very fine reticulate sculpture; mesonotum with a median dimple-like impression before the scutellar fovea, parapsidal furrows deeply impressed at the anterior lateral angles, but entirely effaced on the disc; mesopleuræ reticulately sculptured on the disc, with a broad, rugose or foveolate furrow along the dorsal and anterior borders joining a similar furrow which separates the mesopleuræ from the mesosternum; propodeum and metapleuræ strongly rugose. Wings hyaline, stigma lanceolate emitting the radius at about the basal one-third; the radius strongly angulated at the second cubital cross vein, attaining the margin of the wing some distance above the extreme wing apex, its first abscissa less than

^{*}Proc. U. S., National Museum, Vol. 42.